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FOLEY & LARDNER 777 EAST WISCONSIN AVENUE SUITE 3800 MILWAUKEE, WI 53202-5308				LEFLORE, LAUREL E
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		2673		

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/085,326	HANSON ET AL.	
	Examiner Laurel E LeFlore	Art Unit 2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 04 January 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 17-32 and 35-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 17-32 and 35-45 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 June 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17-19, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai et al. 6,259,597 B1 in view of Moon 6,567,137 B1.

3. In regard to claim 17, Anzai discloses a cover for a portable electronic device. See column 1, lines 43-44, disclosing, "The present invention is directed to a portable electronic device". Further see figure 1, depicting a hinged touch panel 40 which covers the LCD 32 in figure 3. Thus, this touch panel is a cover for a portable electronic device.

This cover further comprises a frame and a touch panel coupled to the frame. See figure 2 and column 2, line 67 to column 4, line 6, disclosing, "To form the touch panel section 40, transparent resistive film sheets 46 and 48 each having substantially the same characteristics are affixed onto both of front and back surfaces of a transparent glass plate 44 (corresponding to a substrate) respectively and, then, a hinge mechanism 50 along with a reinforcement frame 52 are provided on its periphery as shown."

Anzai further discloses a display which is separate from the cover when the cover is positioned proximate the display. See LCD, element 32 of figures 1 and 3, for

example and column 4, lines 15-16, disclosing, "during normal usage, the touch panel section 40 is rotated toward the LCD 32".

Anzai further discloses that the frame may be moved from a first position in which the touch panel overlays the display and the touch panel is useable, to a second position in which the touch panel does not overlay the display. See figures 3 and 4, lines 40-47, disclosing, "FIG. 3 is a diagram showing a normal usage condition, wherein a touch panel section in accordance with this invention is rotated toward a liquid crystal display (LCD) section 32 and fixed to a cover 30 of a notebook PC. FIG. 4 is a diagram showing another usage condition, wherein a touch panel section in accordance with this invention is rotated toward a keyboard 24 and maintained substantially horizontally."

Note that, while Anzai refers to "cover 30", the touch panel section is also a "cover" and does not comprise the display.

Anzai does not disclose a lighting system coupled to the frame and configured to illuminate a display. Anzai is silent as to how the display is illuminated.

Moon discloses an invention in which a cover comprises a lighting system. See figure 4, element 60 and figure 5, depicting the electronic device in a closed state. Note that element 60 is hinged to fold over part of display module 54. In this way, element 60 is a cover. Also see column 3, lines 47-48, disclosing "an auxiliary light source 60 pivotally connected to the display module 54." Thus, the cover comprises lighting system. See figure 7 and column 4, lines 9-10, disclosing, "As shown in FIG. 7, the auxiliary light source 60 includes a lamp 61...a light guide plate 63".

Moon further discloses that the lighting system illuminates a display when the cover panel is positioned proximate the display. See figure 4, depicting the cover panel (light source 60) directing light toward at least a portion of display 52 when positioned over the display, and column 2, lines 60-67, disclosing, "an auxiliary light source apparatus for a reflective liquid crystal display according to an embodiment of the present invention includes a main body; a reflective display module connected pivotally to the main body; and an auxiliary light source, the auxiliary light source being opened and closed from and to the reflective display module, for radiating light onto a display area of the reflective display module."

Moon further teaches in column 2, lines 48-50, that "An object of the present invention is to provide an auxiliary light unit for a reflective liquid crystal display that is adapted to radiate light uniformly."

It would have been obvious to modify the invention of Anzai, by having a lighting system coupled to the frame and configured to illuminate a display when the cover panel is positioned proximate the display, as in the invention of Moon. One would have been motivated to make such a change based on the teaching of Moon to use such a configuration to radiate light onto a reflective display module and to radiate light uniformly.

4. In regard to claim 18, note in the figures that the covers of Anzai and Moon are coupled to a computing device housing.
5. In regard to claim 19, note in the figures that the displays of Anzai and Moon are coupled to a computing device housing.

6. In regard to claim 22, the lighting system of Moon comprises a light guide and a light source. See figure 7 and column 4, lines 9-10, disclosing "a lamp 61" and "a light guide plate 63".
7. In regard to claim 24, note that the portable electronic devices of Anzai and Moon include a display. Also see the rejection of claim 17. Moon further discloses the light guide is configured to direct light toward the display when the cover is positioned proximate the display. See figure 4 and column 4, lines 38-41, disclosing, "The light emitted from the light guide plate 63 thus can be converged onto the effective display area of the reflective liquid crystal display panel 52."
8. In regard to claim 25, Anzai discloses that the touch panel is an analog resistive touch panel comprising a first sheet and a second sheet. See column 1m, lines 50-52, disclosing "a touch panel section formed by affixing transparent resistive film sheets onto both of front and back surfaces of a transparent glass plate respectively."
9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai et al. 6,259,597 B1 in view of Moon 6,567,137 B1 as applied to claim17 above, and further in view of Wilk 6,643,124 B1.
10. In regard to claim 20, Anzai in view of Moon discloses an invention similar to that which is disclosed in claim 20. See rejection of claim 17 for similarities. Anzai in view of Moon does not disclose that the display is a flexible display.

Wilk discloses an invention in which a flexible display is disclosed. Wilk teaches in column 4, lines 45-52, "Lacking a requirement of rigidity, a flexible screen may be manufactured more thinly, and hence of reduced volume, relative to a rigid display

panel. Flexible displays therefore reduce a volume requirement of a compactly folded unit."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Anzai in view of Moon by having the display be a flexible display, as in the invention of Wilk. One would have been motivated to make such a change to the folded unit of Anzai in view of Moon based on the teaching of Wild that flexible displays "may be manufactured more thinly, and hence of reduced volume, relative to a rigid display panel" and "therefore reduce a volume requirement of a compactly folded unit."

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai et al. 6,259,597 B1 in view of Moon 6,567,137 B1 further in view of Wilk 6,643,124 B1 as applied to claim 20 above, and further in view of Branson 2003/0071832 A1.

12. In regard to claim 21, Anzai in view of Moon further in view of Wilk discloses an invention similar to that which is disclosed in claim 21. See rejections of claims 17 and 20 for similarities. Anzai in view of Moon further in view of Wilk does not disclose that the flexible display expands, comprising at least one fold line dividing the flexible display into at least two display sections.

Branson discloses a flexible display device that comprises at least one fold line dividing the flexible display into at least two display sections. See figure 1 and paragraph [0027], disclosing "a user may fold the adjustable display device 100 along any of the vertical portions 109, 110, and 111, or along the horizontal portion 112".

Branson further teaches in paragraph [0004], "Through recent advances in display technology, displays which are flexible in nature and thus able to be folded have been developed." Further, in paragraph [0005], "A foldable display device is configured to fold in a similar manner as a wallet. In this manner, when the device is being carried around by a user, it may easily fit into the user's shirt or jacket pocket. When in use, the user may unfold the display device such that the display screen size of the device is many times larger than the folded size."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Anzai in view of Moon further in view of Wilk by having the flexible display comprise at least one fold line dividing the flexible display into at least two display sections, and thus expand, as in the invention of Branson. One would have been motivated to make such a change based on the teaching of Branson that such folded displays have been developed and allow a device to become smaller for transport and many times larger for use.

13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai et al. 6,259,597 B1 in view of Moon 6,567,137 B1 as applied to claim 22 above, and further in view of Agnew 2002/0084992.

14. In regard to claim 23, Anzai in view of Moon disclose an invention similar to that which is disclosed in claim 23. See rejections of claims 17 and 22 for similarities. Note that Moon discloses a light quide with a light source. Anzai in view of Moon does not disclose that the light source comprises at least one light emitting diode.

Agnew discloses a combined touch panel and display light in which an LED is used as a light source for a light guide. See paragraph [0022], disclosing “an light source 16, such as a light emitting diode (LED) provides illumination to a light guide 18, which provides light for front illumination of display panel 14.” Agnew further teaches in paragraph [0023], “Light guide 18 is designed to conduct light from source 16 across the area of the light guide and to alter the direction of the light downward into the display.”

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the light guide of Anzai in view of Moon by having a light source comprising a light emitting diode, as in the invention of Agnew. One would have been motivated to make such a change based on the teaching of Agnew that such a light guide can conduct light from a light source “across the area of the light guide” and “alter the direction of the light downward into the display.” Further, light emitting diodes are a common and conventional light source, and it is a matter of design choice to use an LED, rather than any other type of light source.

15. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anzai et al. 6,259,597 B1 in view of Moon 6,567,137 B1 as applied to claim 25 above, and further in view of Aufderheide et al. 6,555,235 B1.

16. In regard to claim 26, Anzai in view of Moon disclose an invention similar to that which is disclosed in claim 26. See rejections of claims 17 and 25 for similarities. Anzai in view of Moon do no disclose that at least one of the first and second sheets include a conductive coating.

Aufderheide discloses a touch screen system, teaching (see column 1, lines 26-38, "a conventional resistive touch screen includes two layers which are often referred to as a flex layer and a stable layer. Both the flex layer and the stable layer have transparent conductive coatings on opposing surfaces. A spacer material (or materials) separates the flex layer and the stable layer from each other. The spacer material ensures that an air gap or other relatively non-conductive medium separates the conductive coatings when the touch screen is not touched or depressed. When the outer front surface of the touch screen is deformed or pressed, the two transparent conductive coatings are brought into electrical contact."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Anzai in view of Moon by having at least one of the first and second sheets include a conductive coating. One would have been motivated to make such a change based on the teaching of Aufderheide that such an arrangement is found in a conventional resistive touch panel.

17. In regard to claim 27, Anzai in view of Moon disclose an invention similar to that which is disclosed in claim 27. See rejections of claims 17, 25 and 26 for similarities. Anzai in view of Moon do not disclose that the conductive coating comprises indium tin oxide.

Aufderheide discloses in column 1, lines 54-57, "In analog resistive touch screen, the transparent conductive coatings...are often an indium tin oxide ("ITO") material. The conductive coatings have uniform sheet resistivity."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Anzai in view of Moon by having the conductive coating comprise indium tin oxide. One would have been motivated to make such a change based on the teaching of Aufderheide that the conductive coatings of analog resistive touch screens, "are often an indium tin oxide ("ITO") material. The conductive coatings have uniform sheet resistivity." Thus, ITO is a common and conventional material for the conductive coating and gives a uniform sheet resistivity.

18. Claims 28, 29, 31, 32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon 6,567,137 B1 in view of Anzai et al. 6,259,597 B1 further in view of Agnew 2002/0084992.

19. In regard to claim 28, Moon discloses a portable electronic device (see figure 4, for example) comprising: a computing device having a housing (58) and a display (54) fixably attached to the housing.

Moon further discloses a cover panel (60) having a frame (see figure 7, element 66) and rotatably coupled to the housing and movable between a first position and a second position. See column 3, lines 54-55, disclosing, "the auxiliary light source 60 can be opened and closed from and to the display module 54." See figure 4, element 60 and figure 5, depicting the electronic device in a closed state. Note that element 60 is hinged to fold over part of display module 54. In this way, element 60 is a cover. Also see column 3, lines 47-48, disclosing "an auxiliary light source 60 pivotally connected to the display module 54."

Moon further discloses a lighting assembly coupled to the frame, wherein the lighting assembly is located proximate at least a portion of the display in the second position and the cover does not comprise the display. See figure 4 and column 3, lines 55-57, disclosing, "The auxiliary light source 60 radiates light onto an effective display area of the reflective liquid crystal display panel 52."

Moon further discloses that the lighting assembly comprises a light guide, and the light guide is configured to direct light toward at least a portion of the display when the cover panel is positioned over the display. See figure 7 and column 4, lines 9-10, disclosing, "As shown in FIG. 7, the auxiliary light source 60 includes a lamp 61...a light guide plate 63". Moon further discloses in column 4, lines 24-27, "The light guide plate 63 emits light received via the incidence surface 63a through the output surface 63b to output light received as a line light source into a plane light source." and in column 4, lines 38-41, "The light emitted from the light guide plate 63 thus can be converged onto the effective display area of the reflective liquid crystal display panel 52."

Moon does not disclose a touch panel coupled to the frame and separated from the lighting assembly or that the touch panel is located proximate at least a portion of the display in the second position. However, note that the second position of Moon, depicted in figure 4, is one in which the portable electronic device is open.

Anzai discloses a touch panel coupled to a frame, and which is located proximate at least a portion of the display in the (open) second position. This is depicted in figure 3. Further see column 4, lines 15-16, disclosing, "As shown in FIG. 3, during the normal usage, the touch panel section 40 is rotated toward the LCD 32".

Anzai further teaches in column 4, lines 24, "In this usage condition, it is possible to support not only a conventional input operation by the keyboard 24 but also another input operation, i.e., the tablet function, for using a fingertip to select an icon on the LCD screen, which is visibly seen through the transparent touch panel section 40. In this case, one of the surfaces of the touch panel section 40 is used."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moon by having a touch panel coupled to the frame and separated from the lighting assembly and have the touch panel located proximate at least a portion of the display in the second position, as in the invention of Anzai. One would have been motivated to make such a change based on the teaching of Anzai that with such a touch panel, "it is possible to support not only a conventional input operation by the keyboard 24 but also another input operation, i.e., the tablet function".

Moon in view of Anzai further do not disclose that the lighting assembly comprises at least one light emitting diode.

Agnew discloses a combined touch panel and display light in which an LED is used as a light source for a light guide. See paragraph [0022], disclosing "an light source 16, such as a light emitting diode (LED) provides illumination to a light guide 18, which provides light for front illumination of display panel 14." Agnew further teaches in paragraph [0023], "Light guide 18 is designed to conduct light from source 16 across the area of the light guide and to alter the direction of the light downward into the display."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the light guide of Moon in view of Anzai by having a light source comprising a light emitting diode, as in the invention of Agnew. One would have been motivated to make such a change based on the teaching of Agnew that such a light guide can conduct light from a light source "across the area of the light guide" and "alter the direction of the light downward into the display." Further, light emitting diodes are a common and conventional light source, and it is a matter of design choice to use an LED, rather than any other type of light source.

20. In regard to claim 29, Moon discloses that the display panel is at least one of a reflective, a transflective, and an emissive display. See column 4, lines 40-41, disclosing, "the reflective liquid crystal display panel 52".

21. In regard to claim 31, Moon discloses that the cover panel is coupled to the computing device by at least one hinge. See column 3, lines 51-53, disclosing, "The auxiliary light source 60 is coupled to the upper end of the display module 54 by a hinge structure allowing the auxiliary light source 60 to pivot around a hinge point."

22. In regard to claim 32, Moon in view of Anzai further in view of Agnew disclose means for providing an electrical connection between the computing device and at least one of the lighting assembly and the touch panel. Anzai discloses such electrical connection between the computing device and the touch panel. See figure 2 and column 4, lines 10-14, disclosing, "wiring lines 46A and 48A extending from electrodes of the transparent resistive film sheets 46 and 48 may be electrically connected to an

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associated component in the base unit 20 through a space within the hinge mechanism 50 or its nearby space (see FIG. 5)."

23. In regard to claim 35, Anzai discloses that the touch panel is an analog resistive touch panel comprising a first sheet and a second sheet. See column 1m, lines 50-52, disclosing "a touch panel section formed by affixing transparent resistive film sheets onto both of front and back surfaces of a transparent glass plate respectively."

24. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon 6,567,137 B1 in view of Anzai et al. 6,259,597 B1 further in view of Agnew 2002/0084992 as applied to claim 28 above, and further in view of Branson 2003/0071832 A1.

25. In regard to claim 30, Moon in view of Anzai further in view of Agnew disclose an invention similar to that which is disclosed in claim 30. See rejection of claims 28 for similarities. Moon in view of Anzai further in view of Agnew do not disclose that the display panel is a foldable display that is movable between a collapsed and an expanded position.

Branson discloses a foldable display that is movable between a collapsed and an expanded position. See figure 1 and paragraph [0027], disclosing "a user may fold the adjustable display device 100 along any of the vertical portions 109, 110, and 111, or along the horizontal portion 112".

Branson further teaches in paragraph [0004], "Through recent advances in display technology, displays which are flexible in nature and thus able to be folded have been developed." Further, in paragraph [0005], "A foldable display device is configured

to fold in a similar manner as a wallet. In this manner, when the device is being carried around by a user, it may easily fit into the user's shirt or jacket pocket. When in use, the user may unfold the display device such that the display screen size of the device is many times larger than the folded size."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moon in view of Anzai further in view of Agnew by having the display be a foldable display that is movable between a collapsed and an expanded position, as in the invention of Branson. One would have been motivated to make such a change based on the teaching of Branson that such folded displays have been developed and allow a device to become smaller for transport and many times larger for use.

26. Claims 36 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon 6,567,137 B1 in view of Anzai et al. 6,259,597 B1 further in view of Agnew 2002/0084992 as applied to claim 28 above, and further in view of Aufderheide et al. 6,555,235 B1.

27. In regard to claim 36, Moon in view of Anzai further in view of Agnew disclose an invention similar to that which is disclosed in claim 36. See rejections of claims 28 and 35 for similarities. Moon in view of Anzai further in view of Agnew do not disclose that at least one of the first and second sheets include a conductive coating.

Aufderheide discloses a touch screen system, teaching (see column 1, lines 26-38, "a conventional resistive touch screen includes two layers which are often referred to as a flex layer and a stable layer. Both the flex layer and the stable layer have

transparent conductive coatings on opposing surfaces. A spacer material (or materials) separates the flex layer and the stable layer from each other. The spacer material ensures that an air gap or other relatively non-conductive medium separates the conductive coatings when the touch screen is not touched or depressed. When the outer front surface of the touch screen is deformed or pressed, the two transparent conductive coatings are brought into electrical contact."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moon in view of Anzai further in view of Agnew by having at least one of the first and second sheets include a conductive coating. One would have been motivated to make such a change based on the teaching of Aufderheide that such an arrangement is found in a conventional resistive touch panel.

28. In regard to claim 37, Moon in view of Anzai further in view of Agnew disclose an invention similar to that which is disclosed in claim 37. See rejections of claims 28, 35 and 36 for similarities. Moon in view of Anzai further in view of Agnew do not disclose that the conductive coating comprises indium tin oxide.

Aufderheide discloses in column 1, lines 54-57, "In analog resistive touch screen, the transparent conductive coatings...are often an indium tin oxide ("ITO") material. The conductive coatings have uniform sheet resistivity."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moon in view of Anzai further in view of Agnew by having the conductive coating comprise indium tin oxide. One would have

been motivated to make such a change based on the teaching of Aufderheide that the conductive coatings of analog resistive touch screens, "are often an indium tin oxide ("ITO") material. The conductive coatings have uniform sheet resistivity." Thus, ITO is a common and conventional material for the conductive coating and gives a uniform sheet resistivity.

29. Claims 38 and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon 6,567,137 B1 in view of Anzai et al. 6,259,597 B1.

30. In regard to claim 28, Moon discloses a method for using a portable electronic device (see figure 4, for example) comprising: positioning a cover adjacent to at least a portion of a display attached to a computing device, the cover comprising a lighting assembly, wherein the cover does not include the display and the cover may be moved out of the way of the display. See figure 4, element 60 and figure 5, depicting the electronic device in a closed state. Note that element 60 is hinged to fold over part of display module 54. In this way, element 60 is a cover. Also see column 3, lines 47-48, disclosing "an auxiliary light source 60 pivotally connected to the display module 54." Further, see figure 4 (for example), depicting positioning the cover adjacent to a portion of a display.

Moon further discloses illuminating at least a portion of the display. See column 3, lines 55-57, disclosing, "The auxiliary light source 60 radiates light onto an effective display area of the reflective liquid crystal display panel 52."

Moon does not disclose that the cover comprises a touch panel or entering information into the computing device using the touch panel.

Anzai discloses an invention in which a cover comprises a touch panel and a user enters information into a computing device using the touch panel. This is depicted in figure 3. Further see column 4, lines 15-16, disclosing, "As shown in FIG. 3, during the normal usage, the touch panel section 40 is rotated toward the LCD 32".

Anzai further teaches in column 4, lines 24, "In this usage condition, it is possible to support not only a conventional input operation by the keyboard 24 but also another input operation, i.e., the tablet function, for using a fingertip to select an icon on the LCD screen, which is visibly seen through the transparent touch panel section 40. In this case, one of the surfaces of the touch panel section 40 is used."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moon by having the cover comprise a touch panel and by entering information into the computing device using the touch panel, as in the invention of Anzai. One would have been motivated to make such a change based on the teaching of Anzai that with such a touch panel, "it is possible to support not only a conventional input operation by the keyboard 24 but also another input operation, i.e., the tablet function".

31. In regard to claim 42, Moon discloses that the step of positioning the cover comprises rotating the cover about a hinge coupling the cover to the computing device. See column 3, lines 51-53, disclosing, "The auxiliary light source 60 is coupled to the upper end of the display module 54 by a hinge structure allowing the auxiliary light source 60 to pivot around a hinge point."

32. In regard to claim 43, Moon discloses that the lighting assembly comprises a light guide and a light source. See figure 7 and column 4, line 9, disclosing "a lamp 61" and "a light guide plate 63".

33. In regard to claim 44, see rejection of claim 38 above. Anzai further discloses that the step of entering information into the computing device comprises at least one of writing and drawing. See column 5, lines 59-63, disclosing, "when a memorandum or a signature is to be written into a paper 90 placed on a surface of the touch panel section 40, as shown in FIG. 7, it is possible to correctly capture the inputted result into the base unit 20" and column 6, lines 2-4, disclosing, "it is possible to record data of important information such as handwriting and/or pen pressure of a signature."

34. In regard to claim 45, Anzai discloses that the step of entering information into the computing device comprises contacting the touch panel using at least one of a pen, a stylus, and a fingertip. Note that figure 3 depicts using a fingertip and figure 4 depicts using a pen or stylus.

35. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon 6,567,137 B1 in view of Anzai et al. 6,259,597 B1 as applied to claim 38 above, and further in view of Wilk 6,643,124 B1.

36. In regard to claim 39, Moon in view of Anzai disclose an invention similar to that which is disclosed in claim 39. See rejection of claim 38 for similarities. Moon in view of Anzai does not disclose that the display is a flexible display.

Wilk discloses an invention in which a flexible display is disclosed. Wilk teaches in column 4, lines 45-52, "Lacking a requirement of rigidity, a flexible screen may be

manufactured more thinly, and hence of reduced volume, relative to a rigid display panel. Flexible displays therefore reduce a volume requirement of a compactly folded unit."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moon in view of Anzai by having the display be a flexible display, as in the invention of Wilk. One would have been motivated to make such a change to the folded unit of Moon in view of Anzai based on the teaching of Wild that flexible displays "may be manufactured more thinly, and hence of reduced volume, relative to a rigid display panel" and "therefore reduce a volume requirement of a compactly folded unit."

37. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon 6,567,137 B1 in view of Anzai et al. 6,259,597 B1 further in view of Wilk 6,643,124 B1 as applied to claim 39 above, and further in view of Branson 2003/0071832 A1.

38. In regard to claims 40 and 41, Moon in view of Anzai further in view of Wilk disclose an invention similar to that which is disclosed in claims 40 and 41. Moon in view of Anzai further in view of Wilk do not disclose expanding the flexible display or that the display is configured to provide a large form factor display.

Branson discloses expanding flexible display device and providing a large form factor display. See figure 1 and paragraph [0027], disclosing "a user may fold the adjustable display device 100 along any of the vertical portions 109, 110, and 111, or along the horizontal portion 112".

Branson further teaches in paragraph [0004], "Through recent advances in display technology, displays which are flexible in nature and thus able to be folded have been developed." Further, in paragraph [0005], "A foldable display device is configured to fold in a similar manner as a wallet. In this manner, when the device is being carried around by a user, it may easily fit into the user's shirt or jacket pocket. When in use, the user may unfold the display device such that the display screen size of the device is many times larger than the folded size."

Further in regard to claim 40, a foldable display that expands to a larger size is a large form factor display, as best understood.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Moon in view of Anzai further in view of Wilk by flexible display expand and provide a large form factor display, as in the invention of Branson. One would have been motivated to make such a change based on the teaching of Branson that such folded displays have been developed and allow a device to become smaller for transport and many times larger for use.

Response to Arguments

39. Applicant's arguments with respect to independent claims 17, 28, 38 and their dependents have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

40. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sirola et al. 2001/0012769 A1 discloses an invention in which a cover for a portable electronic device that incorporates a touch panel separate from a display.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurel E LeFlore whose telephone number is (571) 272-7672. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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ZZZ
LEL
6 April 2005


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